4,761,471 **Urist** [45] Date of Patent: Aug. 2, 1988 [54] BONE MORPHOGENETIC PROTEIN [58] Field of Search 530/350, 417, 840, 355; COMPOSITION [75] Inventor: Marshall R. Urist, Pacific Palisades, [56] References Cited **PUBLICATIONS** [73] Assignee: The Regents of the University of Urist et al., "A Soluble Bone Morphogenetic Protein California, Berkley, Calif. Extracted from Bone Matrix with a Mixed Aqueous and Nonaqueous Solvent", Proc. Soc. Exp. Bio. and Med., [21] Appl. No.: 899,020 162, 48-53 (1979). [22] Filed: Aug. 22, 1986 Primary Examiner-Delbert R. Phillips Assistant Examiner-Nathan M. Nutter Related U.S. Application Data Attorney, Agent, or Firm-Kenyon & Kenyon Division of Ser. No. 523,606, Aug. 16, 1983, Pat. No. [60] 4,619,989, which is a continuation-in-part of Ser. No. **ABSTRACT** 260,726, May 5, 1981, Pat. No. 4,455,256, which is a BMP compositions including the human factor and continuation of Ser. No. 174,906, Aug. 4, 1980, Pat. bovine factor thereof, the process of isolating BMP No. 4,294,753. compositions and factors, and the use of such factors [51] Int. Cl.⁴ C07G 7/00; C07K 15/06 and compositions to induce bone formation in animals. [52] U.S. Cl. 530/350; 530/417; 530/840: 424/95

[11]

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